CLAIMS

 A limb for a breathing circuit including, an inlet,

an outlet,

an enclosing wall defining a gases passageway between said inlet and said outlet, at least a region of said enclosing wall being of a material that allows the passage of water vapour without allowing the passage of liquid water or respiratory gases, and

a heating means located within said limb, said heating means comprising an elongate heating element.

- 2. A limb as claimed in claim 1, wherein said limb is an expiratory limb and said heating means is located in an expiratory flow path of said limb.
- 3. A limb as claimed in claim 1, wherein said heating means lies freely in said limb to settle over at least some of its length at low points in said limb where condensed water vapour may collect.
- 4. A limb as claimed in claim 2, wherein said heating means lies freely in said limb to settle over at least some of its length at low points in said limb where condensed water vapour may collect.
- 5. A limb as claimed in claim 1, wherein said breathing circuit is a coaxial breathing circuit including,

an inner conduit, having said inlet, said outlet and said enclosing wall, an outer conduit, having a second inlet and a second outlet, said inner conduit located within said outer conduit,

said inlet of said inner conduit and said second outlet of said outer conduit being located at a first end of said limb, and

said outlet of said inner conduit and said second inlet of said outer conduit

being located at a second end of said limb, and

said heating means is located in a space between said inner conduit and said outer conduit.

6. A limb as claimed in claim 3, wherein said breathing circuit is a coaxial breathing circuit including,

an inner conduit, having said inlet, said outlet and said enclosing wall, an outer conduit, having a second inlet and a second outlet, said inner conduit located within said outer conduit,

said inlet of said inner conduit and said second outlet of said outer conduit being located at a first end of said limb, and

said outlet of said inner conduit and said second inlet of said outer conduit being located at a second end of said limb, and

said heating means is located in a space between said inner conduit and said outer conduit.

- 7. A limb as claimed in claim 1, wherein said limb includes at least one helically wound polymer tape or strip, part or all of said strip being of a material that allows the passage of water vapour without allowing the passage of liquid water or respiratory gases, respective edges of adjacent turns of said strip being adjoining or overlapping and bonded.
- 8. A limb as claimed in claim 5, wherein said limb includes at least one helically wound polymer tape or strip, part or all of said tape or strip being of a material that allows the passage of water vapour without allowing the passage of liquid water or respiratory gases, respective edges of adjacent turns of said strip being adjoining or overlapping and bonded.
- 9. A limb as claimed in claim 7, including lateral reinforcement against crushing wherein said lateral reinforcement is a helical bead disposed over said

adjoining or overlapping edges between turns of strip.

10. A limb as claimed in claim 8, including lateral reinforcement against crushing wherein said lateral reinforcement is a helical bead disposed over said adjoining or overlapping edges between turns of strip.